



PN-G-90100 Polish Mining Rubber Cables

OnGcrekgz-G(S) / OnGcrekgz-G(Z)

S/Z-Series MV Mining Rubber Cable

PN-G-90105 · 3.6/6 & 6/10 kV · Radial Cu + semicon screens ('rekg') · (S) gallery & (Z)



PN-G-90105

3.6/6-6/10 kV

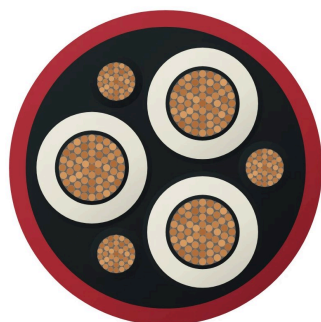
Radial Screened (S)/(Z)

Application

OnGcrekgz-G(S) and OnGcrekgz-G(Z) are 3.6/6 kV and 6/10 kV radial-screened medium-voltage mining rubber cables to PN-G-90105. The 'r' denotes a radial metallic copper screen over the semi-conductive rubber layer ('rekg') for high earth-fault capacity

Typical uses: 3.6/6 & 6/10 kV Underground Mines, District Mobile Transformer Stations, High-Power 3.3-6 kV Longwall Faces, Mine Shaft & Incline MV Trunk Lines, Heavy Tunnel Boring Machines (TBM)

Construction



Cross-section, not to scale

1	Flexible copper phase conductor	IEC 60228 Class 5
2	Inner conductor stress-control layer	PN-G-90105
3	+90 °C MV EPR dielectric ('c')	PN-G-90105
4	Outer semicon + radial copper screen	PN-G-90105 / ZN-TF-212
5	Pilot core ('z') & earth conductor	PN-G-90105
6	Anti-torsion reinforcement braid	ZN-TF-212
7	Underground MV mining PCP sheath ('-G')	PN-G-90105

Technical data

Typical values

Rated voltage U0/U	3.6/6 kV or 6/10 kV AC
Routine AC test voltage	11 kV (3.6/6 kV) / 17 kV (6/10 kV)
Metallic radial screen ('r')	Low-impedance copper wire/braid screen
Max. conductor operating temp.	+90 °C continuous ('c' MV EPR)
Mobile ambient range	-25 °C to +60 °C
Min. laying temperature	-15 °C
Min. bend radius (S-series)	6 × overall diameter (D)
Max. tensile pull (S / Z)	15 N/mm ² (S) / 25 N/mm ² (Z)
Crush & impact resistance	Heavy underground 'G' PCP sheath
Flame retardance	IEC 60332-1-2 / PN-G-90100 'G'
Ozone & partial discharge	Triple-extruded MV EPR + 'rekg'
EMC & radial field containment	100 % radial electric field control
Standards	PN-G-90105 / ZN-TF-212

Maximum system voltage Um	7.2 kV or 12.0 kV AC
Partial discharge level	≤ 20 pC at 1.5 × U0
Pilot core voltage rating	250 V AC
Max. short-circuit temperature	+250 °C (max. 5 s)
Fixed ambient range	-40 °C to +60 °C
Metallic screen SC rating	+200 °C earth-fault thermal limit
Min. bend radius (Z-series)	10 × overall diameter (D)
Torsional stability (Z-series)	±50 °/m anti-twist braid
Tear resistance	≥ 18 N/mm (Z-series)
Mineral oil & hydraulic emulsion	EN 60811-404 resistant PCP
Mine water & humidity	Acidic/alkaline mine water resistant
Halogen status	Polychloroprene elastomer

Sizes

12 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Series, Voltage & Configuration	Phase size mm ²	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
OnGcrekgz-G(S) — Roadway & semi-fixed MV mining feeder series 6 sizes						
☐ OnGcrekgz-G(S) 3.6/6 kV 3×25+1×16+1×6	3.6/6 kV 3×25+1×16+1×6	25	44.0	1,020	2,680	264
☐ OnGcrekgz-G(S) 3.6/6 kV 3×35+1×16+1×6	3.6/6 kV 3×35+1×16+1×6	35	46.8	1,315	3,150	281
☐ OnGcrekgz-G(S) 3.6/6 kV 3×50+1×25+1×6	3.6/6 kV 3×50+1×25+1×6	50	51.6	1,845	3,980	310
☐ OnGcrekgz-G(S) 6/10 kV 3×50+1×25+1×6	6/10 kV 3×50+1×25+1×6	50	56.0	1,860	4,460	336
☐ OnGcrekgz-G(S) 6/10 kV 3×70+1×35+1×6	6/10 kV 3×70+1×35+1×6	70	60.8	2,540	5,490	365
☐ OnGcrekgz-G(S) 6/10 kV 3×95+1×50+1×6	6/10 kV 3×95+1×50+1×6	95	66.5	3,420	6,810	399
OnGcrekgz-G(Z) — Reinforced trailing & dynamic MV mining series 6 sizes						
☐ OnGcrekgz-G(Z) 3.6/6 kV 3×25+1×16+1×6	3.6/6 kV 3×25+1×16+1×6	25	45.6	1,020	2,860	274
☐ OnGcrekgz-G(Z) 3.6/6 kV 3×35+1×16+1×6	3.6/6 kV 3×35+1×16+1×6	35	48.5	1,315	3,360	291
☐ OnGcrekgz-G(Z) 3.6/6 kV 3×50+1×25+1×6	3.6/6 kV 3×50+1×25+1×6	50	53.4	1,845	4,220	320
☐ OnGcrekgz-G(Z) 3.6/6 kV 3×70+1×35+1×6	3.6/6 kV 3×70+1×35+1×6	70	58.2	2,540	5,210	349
☐ OnGcrekgz-G(Z) 6/10 kV 3×50+1×25+1×6	6/10 kV 3×50+1×25+1×6	50	57.8	1,860	4,720	347
☐ OnGcrekgz-G(Z) 6/10 kV 3×70+1×35+1×6	6/10 kV 3×70+1×35+1×6	70	62.6	2,540	5,780	376

– Outer diameters and weights are nominal factory values subject to ±5 % manufacturing tolerance per PN-G-90105 / ZN-TF-212.

Electrical & ampacity data

12 sizes

Configuration	Max. DC R @ 20 °C Ω/km	Current rating in air (A)	Current rating installed (A)	Mutual C pF/m≈	AC test V rms
3.6/6 kV 3×25+1×16+1×6	0.780	123	105	114	11,000
3.6/6 kV 3×35+1×16+1×6	0.554	152	129	129	11,000
3.6/6 kV 3×50+1×25+1×6	0.386	189	161	150	11,000
6/10 kV 3×50+1×25+1×6	0.386	189	161	150	17,000
6/10 kV 3×70+1×35+1×6	0.272	233	198	180	17,000
6/10 kV 3×95+1×50+1×6	0.206	282	240	216	17,000
3.6/6 kV 3×25+1×16+1×6	0.780	123	105	114	11,000
3.6/6 kV 3×35+1×16+1×6	0.554	152	129	129	11,000
3.6/6 kV 3×50+1×25+1×6	0.386	189	161	150	11,000
3.6/6 kV 3×70+1×35+1×6	0.272	233	198	180	11,000
6/10 kV 3×50+1×25+1×6	0.386	189	161	150	17,000
6/10 kV 3×70+1×35+1×6	0.272	233	198	180	17,000

– Current ratings apply at +25/+30 °C ambient in free air; apply standard derating factors for elevated ambient or drum coiling.

Standards and approvals

✓ PN-G-90105 / ZN-TF-212

✓ IEC 60332-1-2

✓ WUG / CE

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

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Email

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Web

tebaoflex.com/cables/ongcrekgz-g-s-ongcrekgz-g-z-s-z-series-mv-mining-rubber-cable



Typical values for this cable type, based on PN-G-90105 / ZN-TF-212. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.